

## CLAIMS:

1. A transmitting method of transmitting data using a layered communication model, comprising the steps of  
generating at a first layer a first communication fragment comprising a first address reference referring to a first entity,  
5 generating at a second layer below the first layer a second communication fragment based on the first communication fragment and further comprising a second address reference referring to a second entity which is related to the first entity,  
transmitting data comprising the second communication fragment,  
characterized in that  
10 the transmitting method further comprises the step of  
removing at least partly the first address reference in the transmitted data.
2. The transmitting method according to claim 1, wherein cryptographic protection is provided for the first communication fragment before the first address reference  
15 is at least partly removed.
3. The transmitting method according to claim 2, wherein cryptographic protection is provided only at a single layer in the communication model.
- 20 4. The transmitting method according to claim 3, wherein the single layer equals the layer where the message was initiated.
5. The transmitting method according to claim 1, wherein the first address reference is replaced by an information field referring to the second address reference.  
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6. A receiving method of receiving data using a layered communication model, comprising the step of  
receiving data comprising a second communication fragment,  
- the second communication fragment

comprising a second address reference referring to a second entity  
which is related to a first entity,

being based on a first communication fragment comprising a first  
address reference to the first entity, and

5 retrieving the first communication fragment from the second communication  
fragment, characterized in that

the first address reference is at least partly omitted in the received data, and

the receiving method further comprises the step of restoring the first address  
reference in retrieving the first communication fragment.

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7. The receiving method according to claim 6, wherein cryptographic protection  
of the first communication fragment is verified after the first address reference is retrieved.

8. The receiving method according to claim 7, wherein cryptographic protection  
15 is provided only at a single layer in the communication model.

9. The receiving method according to claim 8, wherein the single layer equals the  
layer where the message was initiated.

20 10. The receiving method according to claim 6, wherein the receiving method  
retrieves the first address reference using an information field in the received data which  
replaces the first address reference and refers to the second address reference.

11. System for communication using a layered communication model, the system  
25 comprising

transmitter means

being arranged to generate at a first layer a first communication  
fragment comprising a first address reference referring to a first entity, and

30 further being arranged to generate at a second layer below the first  
layer a second communication fragment based on the first communication fragment and  
further comprising a second address reference referring to a second entity which is related to  
the first entity,

communication means

being arranged to transmit data comprising the second communication fragment, and

receiving means

being arranged to receive data comprising the second communication  
5 fragment, and

further being arranged to retrieve the first communication fragment from the second communication fragment,  
characterized in that

the transmitter means is arranged to at least partly omit the first address  
10 reference from the transmitted data, and

the receiving means is arranged to restore the first address reference in retrieving the first communication fragment from the received data.

12. A transmitter device for transmitting data using a layered communication  
15 model, the transmitter device

being arranged to generate at a first layer a first communication fragment comprising a first address reference referring to a first entity,

further being arranged to generate at a second layer below the first layer a second communication fragment based on the first communication fragment and further  
20 comprising a second address reference referring to a second entity which is related to the first entity,

further being arranged to transmit data comprising the second communication fragment, characterized in that

the transmitter device is further arranged to remove at least partly the first  
25 address reference in the transmitted data.

13. A receiver device for receiving data using a layered communication model, the receiver device

being arranged to receive data comprising a second communication fragment,  
30 - the second communication fragment

comprising a second address reference referring to a second entity which is related to a first entity,

being based on a first communication fragment comprising a first address reference to the first entity, and

further being arranged to retrieve the first communication fragment from the second communication fragment, characterized in that

the first address reference is at least partly omitted in the received data, and

the receiver device is further arranged to restore the first address reference in  
5 retrieving the first communication fragment.

14. A signal for carrying data generated according to a layered communication model,

the data being generated according to a layered communication model

10 comprising

a first layer in which a first communication fragment comprising a first address reference referring to a first entity is generated,

a second layer below the first layer in which a second communication fragment comprising a second address reference referring to a second entity related to the first entity and based on the first communication fragment is generated,  
15 characterized in that

the signal carries the second communication fragment in which the first address reference is at least partly omitted.

20 15. A transmitter computer program product to implement communication using a layered communication model, the transmitter computer program product

being arranged to generate at a first layer a first communication fragment comprising a first address reference referring to a first entity,

further being arranged to generate at a second layer below the first layer a second communication fragment based on the first communication fragment and further comprising a second address reference referring to a second entity which is related to the first entity,  
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further being arranged to transmit data comprising the second communication fragment, characterized in that

30 the transmitter computer program product is further arranged to omit the first address reference in the transmitted data.

16. A receiver computer program product to implement communication using a layered communication model, the receiver computer program product

- being arranged to receive data comprising a second communication fragment,  
- the second communication fragment  
comprising a second address reference referring to a second entity  
which is related to a first entity,
- 5 being based on a first communication fragment comprising a first  
address reference to the first entity, and  
further being arranged to retrieve the first communication fragment from the  
second communication fragment,  
a first layer in which a first communication fragment comprising a  
10 first address reference referring to a first entity is generated,  
a second layer below the first layer in which a second communication  
fragment comprising a second address reference referring to a second entity related to the  
first entity and based on the first communication fragment is generated,  
characterized in that
- 15 the first address reference is at least partly omitted in the received data, and  
the receiver computer program product is further arranged to restore the first  
address reference in retrieving the first communication fragment.